give students an edge up are cooperated learning and even outreach programs like the one Brookhaven National Laboratory provides. The purpose of this study is to uncover the most effective method to be used in classrooms which will allow each and every student to reach his or her full potential. That being the case, it is important to develop some kind of progress report to correlate the techniques used and the advancement of the students.

Successful Integration of Staff and Users into Oak Ridge National Laboratory's Neutron Sciences Directorate. Jennifer STINNETT (University of Tennessee, Knoxville, TN); CHRISSI SCHNELL (Oak Ridge National Laboratory, Oak Ridge, TN). For any scientific research laboratory to become one of the foremost facilities, it is crucial to attract and retain the best employees. To do this, a laboratory must be attractive to employees not only within their field of research, but also with the way they present their community and its resources. Oak Ridge National Laboratory (ORNL) is no exception. My project involves researching and exploring different methods to help attract new staff and users and to then help integrate them into ORNL, and more specifically to my project, the Neutron Sciences Directorate (NScD). Previously, the NScD was relying on a website that provided inadequate information to incoming employees and visitors. The scope of information provided was minimal and the coverage was lacking. As part of my project, I surveyed, gathered and organized new information, and enhanced the content of the present information. Based on the needs expressed by new staff, the information ranged from how to get a social security card to a list of local movie theaters. The information collected was vast and varied, but was all relevant and informative, and was information of interest to new and/or international persons. My project also consisted of building a new web community for NScD employees. For this I used Publisher, Photoshop and PowerPoint. The community, tentatively entitled "Friendship Web" allows employees to connect to one another outside the office. Employees voluntarily register and create their own page; complete with a picture, contact information, and any optional personal information they wish to include. They are then able to select their interests/talents/activities from a database, which are also listed on their page. This allows NScD employees to log on and find colleagues with shared interests; helping foster stronger relationships and a healthier work environment. It is also crucial to helping new employees feel welcome, and can prove resourceful when needing to locate employees who speak certain languages for translation purposes. The final part of my project consists of photographically documenting the NScD. Upon completion of this portion, new organization charts will be constructed, and locating and identifying people will be easier than the current method, which is solely on the internet and is not comprehensive. My project makes the transition into ORNL's NScD seamless, and also creates a better work environment for those already employed.

Waste Management

Construction of a Functional Replica of the Transfer Chute in the Clean Transfer Area of the Alpha-Gamma Hot Cell Facility. ERIC BECKER (University of Illinois, Urbana-Champaign, IL); DONAL PREUSS (Argonne National Laboratory, Argonne IL). The Clean Transfer Area (CTA) is part of the Alpha-Gamma Hot Cell Facility (AGHCF) where 7-gallon drums containing Remote-Handled Transuranics (RH-TRU) are transferred to 30-gallon drums. The drums are lined with plastic pouches that are subsequently vacuum sealed and tightly covered for transportation off-site following the AGHCF-OPS-305 RH-TRU 30-gal Waste Drum Outloading procedure. The CTA is radioactively contaminated, however, making practicing the Waste Drum Outloading procedure in it unsafe. Workers may receive more than the allowed radiation dosage if they are in the CTA for long periods of time. The purpose of building a replica of the transfer chute in the CTA is to provide a safe environment for the radiation workers to practice the . Waste Drum Outloading procedure while still using an accurate model of the structure they will be working with. The transfer chute in the CTA was measured both from the inside and outside using a sextant. The controlled area where the replica was constructed was also assessed for usable parts and existing structures. The final step in acquiring the necessary measurements was researching the parts that needed to be ordered from outside sources. The replica design was then drawn and reviewed by the Assistant Facility Manager of the AGHCF, in addition to a Cognizant Systems Engineer. The specified materials were then ordered, both from outside vendors and from the Argonne Central Shops. A procedure outlining the necessary materials, tools, and assembly steps was written to equip the persons responsible to complete the replica accurately, efficiently, and safely. Once the materials arrived, they were moved to the assembly area where the

replica would be constructed. Construction proceeded as outlined in the assembly procedure, and completed on-time (July 16, 2007), allowing the radiological workers time to practice the operation before the actual outloading takes place. The execution of the assembly procedure was also documented in order for later disassembly and reassembly to take place.